

REMARKS

The Office Action dated January 31, 2003 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 1-21 are pending in the application. No new matter has been added, and no new issues are raised which require further consideration or search. In view of the following remarks, reconsideration and allowance of these claims are respectfully requested.

I. CLAIM REJECTIONS UNDER 35 USC § 103

Claims 1-5, 7-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rautiola et al. (U.S. Patent No. 5,949,775,) (herein after "Rautiola '775").

The Office Action alleged that Rautiola discloses a gateway arrangement for receiving traffic comprising a first type of traffic and a second type of traffic. The Office Action admits that Rautiola '775 is silent on several elements of the gateway arrangement claimed in the present invention. Specifically, the Office Action admits that Rautiola '775 is silent on a first and second gateway; a first gateway being arranged to separate the first and second types of traffic; the second gateway being arranged to extract information from the first type of traffic and output the information to the first gateway; and the first gateway having an output interface which is arranged to output the second type of traffic in accordance with the extracted information.

The Office Action further alleges that since one gateway translates the LAN data format/coding into wireless data format/coding internally it would have been obvious to

one skilled in the art to separate those software routines and host them on different servers (e.g. gateways) in order to distribute the processing load and/or distribute the two computers so they are not co-located which can be a single point of failure.

Applicants respectfully traverse this rejection and submit that the prior art cited in the Office Action fails to teach, suggest or disclose the features of the claimed invention. Furthermore, there is no incentive or motivation to modify Rautiola '775 to yield the claimed invention.

Claim 1, upon which claims 2-19 are dependent, recites a gateway arrangement for receiving traffic comprising a first type of traffic and a second type of traffic. The gateway arrangement comprises a first gateway and a second gateway. The first gateway is arranged to separate the first and second types traffic, and the first type of traffic is output to the second gateway. The second gateway is arranged to extract information from the first type of traffic and output the information to the first gateway. The first gateway includes an output interface which is arranged to transmit the second type of traffic dependent upon the extracted information.

Claim 20, upon which claim 21 is dependent, recites a gateway arranged to receive first and second types of traffic. The gateway comprises means for separating the first and second types of traffic and means for outputting the first type of traffic to a second gateway for processing by the second gateway. The gateway also comprises means for receiving a processed first type of traffic from the second gateway, whereby the second

type of traffic is transmitted by the means for outputting dependent upon the processed first type of traffic received from the second gateway.

As a result of the claimed invention, a gateway arrangement is provided. One advantage of the present invention is that one signalling gateway may be provided for a number of gateways. Thus, the claimed invention provides significant advantages over prior systems in solving problems associated with the differences in the requirements for processing signalling and payload traffic. The claimed invention also mitigates the problem associated with the payload traffic since the volume of the payload traffic is generally greater than that of the signalling traffic. These advantages are not all inclusive but merely exemplars of some of the benefits of the invention.

Applicants submit that the Rautiola '775 fails to disclose or suggest the elements of the invention as set forth in the claimed invention, and thereby fails to provide the critical and nonobvious advantages that are provided by the invention. To establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The teaching or suggestion to make the claimed combination must be found in the prior art, and not be based on Applicants' disclosure. See, M.P.E.P. §§ 2143.01 and 2143.03.

Rautiola '775 discloses an integrated office communication system that employs a local area network (LAN) for intra-office communications. Connections to the outside

world are made via a gateway computer 1. The gateway computer 1 shown in Figure 2 functions as a link between the LAN and a mobile switching center. Rautiola also suggests that a wide variety of office equipment can be connected to the LAN. This office equipment may transmit different types of data such as voice, computer, fax and printer.

Applicants submit that Rautiola does not render the claimed invention obvious because Rautiola '775 does not teach or suggest several limitations recited in the claims. Furthermore, Rautiola '775 does not teach or suggest the structure and the operation of the claimed invention. Applicants submit that, in the present invention, gateways are used to connect two differing networks or systems. The two differing systems may be a wireless intranet office system and a conventional cellular telecommunications system. For example, according to one embodiment of the invention, a gateway needs to be able to handle at least signalling and payload traffic. These two types of traffic are separated and handled by separate dedicated gateways. One gateway may be a media gateway and the other gateway may be a signalling gateway.

The media gateway 64 may be arranged to receive payload and signalling information. The media gateway 64 separates the signalling information from the payload, terminates the lower signalling layers and forwards the upper layer signalling information to the signalling gateway 62. The media gateway 64 includes a separation layer 74 that includes a HDLC (high level data link control) which is configured to catch signalling information carried in a certain time slot. The media gateway alters the

protocol of the signalling information received by the interface 66 to a format in which conforms to the protocol of the LAN.

The signalling gateway 62 may be arranged to extract information from the signalling information received from the media gateway 64. In particular, the signalling gateway may be arranged to decode the received signalling information to extract the information. This information may include the time slot for the associated payload and the IP address. This information is passed back to the media gateway 64 via the LAN interfaces 68 and 70 and the LAN 10.

As noted above, Applicants set forth in independent claim 1 a gateway arrangement for receiving at least first and second traffic types. The first type may be signalling information traffic and the second traffic type may be payload information traffic for with two dedicated gateways are required. A first gateway separates the first and second traffic types and outputs the first traffic type to a second gateway. As discussed above, the first gateway may be a media gateway and the second gateway may be a signalling gateway. The second gateway extracts information from the first type of traffic and outputs the extracted information to the first gateway. The extracted information may at least include, for example, time slot information and IP address information. The first gateway may be arranged to transmit the second type of traffic dependent upon the extracted information. Signalling information extracted by the signalling gateway can be sent back to the media gateway, so that the media gateway can transmit the payload traffic to the appropriate destination.

In comparison, Rautiola '775 merely discloses a gateway arrangement for receiving traffic. Rautiola '775 discloses a cellular radio network for use in an office environment that connects a local area network. This is significantly different from that which is claimed in the present application.

According to the Office Action, Rautiola '775 discloses that different data types such as voice, computer and printer are present on the LAN and this data can be transmitted to a mobile system via "one gateway." The Office Action further alleges that since the "one gateway" translates the LAN data from one format to another format that it would have been obvious to one skilled in the art to separate these processes, for each data type, onto other gateways. However, the text of Rautiola '775 merely discloses that various systems can be connected to a LAN. The gateways in Rautiola '775 are known in the art and are used to connect different systems. In Rautiola '775, there is a gateway at each LAN interface with another system (gateways 1 and 13, as shown in Fig. 2). Thus, Rautiola '775 merely discloses that any translation of formats occurs between a single system and the LAN. Gateways 1 and 13 only handle the translation or processing from the GSM to the LAN and the ATM to the LAN, respectively. There is no separation of processes in Rautiola '775 that could result in or suggest a second gateway, as alleged in the Office.

Rautiola also differs from the claimed invention because Rautiola does not disclose or suggest any internal components of its gateways that are included in the claimed invention. Rautiola '775 is different from Applicants' claimed invention at least

because Rautiola '775 merely discloses gateways being used to connect systems together, whereas the Applicants set forth a first gateway arranged to separate the first and second types of traffic, as set forth in claim 1.

Rautiola '775 is also different from the Applicants' claimed invention because Rautiola merely discloses translation of formats occurring between single system and a LAN whereas the Applicants set forth a second gateway arranged to extract information from a first type of traffic and output the extracted information to the first gateway, as set forth in claim 1.

The Office Action has asserted that two gateways could be implemented in Rautiola '775, but Rautiola '775 fails to disclose a second gateway extracting information from the first type of traffic and outputting it to the first gateway or implementation thereof.

Rautiola '775 is also different from the Applicants' claimed invention because Rautiola merely discloses a gateway being used to connect systems together whereas the Applicants set forth a first gateway having an output interface arranged to transmit the second type of traffic dependent upon the extracted as set forth in claim 1.

Thus, for at least these reasons, Rautiola '775 does not render claims 1 and 20 obvious.

In addition, claims 2-19 depend from claim 1, and claim 21 depend from claim 20 and are therefore allowable at least for the reasons that claims 1 and 20 are allowable, respectively, and for the specific limitations recited therein.

The Office Action further cites Wynn Quon (GB-2315190A) as a second known teaching. The Office Action alleges that Wynn Quon teaches an Internet Telephony Gateway (ITG) that enables the establishment of phone calls between a packet switched network carrying data packets and a circuit switched network carrying telephone signals that comprises a first and second interface unit. The Office Action interprets the gateway device of Wynn Quon which uses a first and second interface unit to constitute a first and second gateway that requires the extraction/reassembly of differing types of data.

Applicants respectfully submit that it is unclear as to how the Wynn Quon reference is being applied by Office Action against the present invention. If the Office Action is relying upon Wynn Quon in combination with Rautiola '775 to allegedly support the rejection under 35 U.S.C. § 103, then Applicants respectfully request the withdrawal of the present rejection and that a proper rejection be provided in the next Office Action.

Nevertheless, Applicants provide the following comments as a courtesy. Applicants submit that the Wynn Quon, like Rautiola '775, fails to teach, suggest or disclose the features of the claims. Therefore, the claimed invention is also patentable over Wynn Quon for the reasons which follow.

Wynn Quon discloses an ITG for permitting telephone calls initiated from an ordinary telephone to a subscriber on the Internet. The Gateway includes a first interface unit (44) for connection to the circuit switched network, a second interface unit (45) for connection to the packet switched network and a device for receiving signals at the first interface and converting them to data packets for transmission over the packet switched network and vice versa. As discussed in the last paragraph on page 6 of Wynn Quon, calls originating on the Internet are routed to the TCP/IP interface 45 (second interface unit 45). The incoming data packets are depacketized and routed through the switching matrix to the appropriate outgoing telephone line module 44 (first interface unit 44), where the data packets are sent over the PSTN as either analog or digital signals. According to Wynn Quon, the device alleged works in a similar manner in reverse.

Wynn Quon fails to render the claimed invention obvious because Wynn Quon fails to disclose or suggest several limitations of the claimed invention. First, Wynn Quon does not disclose or suggest that the first gateway is arranged to separate the first and second types of traffic. There is no disclosure in Wynn Quon that either the first or the second interface unit separates a first and second type of traffic. The second element that Wynn Quon fails to disclose or suggest is that the second gateway is arranged to extract information from the first type of traffic and output the information to the first gateway. Wynn Quon merely teaches that the incoming data packets are depacketized and routed through the switching matrix to the appropriate outgoing telephone line

module 44. In other words, Wynn Quon merely discloses a gateway arrangement comprising two interface units for transforming packet switched data to switched data. Essentially, the interface units in Wynn Quon act in a serial manner, where the first interface unit processes the data before passing the data onto the second interface unit. Another patentable distinction recited in the claimed invention is that the first gateway handles the payload traffic and the second gateway handles the signalling traffic, as discussed above. Third, Wynn Quon also fails to teach or suggest that the first gateway includes an output interface which is arranged to transmit the second type of traffic dependent upon the extracted information.

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rautiola '775 et al.(U.S. Patent No. 5,949, 775) in view of Rautiola (U.S. Patent No. 5,956,331) (herein after "Rautiola 331").

The Office Action alleged that Rautiola '331 discloses all of the elements of claim 6, with the exception of wherein the first gateway has a second interface for connecting to a mobile telecommunications network. Applicants respectfully traverse these rejections and submit that the prior art cited in the Office Action fails to teach, suggest or disclose the features of the claimed invention.

Rautiola '331 discloses an integrated radio communication system. The connection between networks is controlled and handled by a gateway computer 1 located in each radio LAN. The radio LAN consists of coverage areas or cells of the data

terminals. The gateway establishes a data transfer connection between the radio LAN and a switching center of a general cellular radio network and allegedly carries out the required protocol conversions between the data transfer used in the radio LAN and the data transfer protocol used in the general cellular radio network.

Rautiola '331 fails to correct the deficiencies of Rautiola discussed above. Therefore, Rautiola '775 and Rautiola '331 taken in combination or alone, does not teach or suggest the claimed invention because the proposed combination of references merely result in a system having gateways being used to connect systems together. In contrast, Applicants set forth a first gateway arranged to separate the first and second types of traffic, a second gateway arranged to extract information from the first type of traffic and output the extracted information to the first gateway, and the first gateway having an output interface arranged to transmit the second type of traffic dependent upon the extracted information, as set forth in claim 1.

CONCLUSION

Claims 1-21 are pending. No new matter has been added. In view of the above remarks, reconsideration and allowance of these claims are respectfully requested.

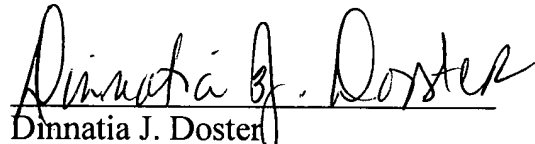
Both Rautiola '775 and Rautiola '331 and Wynn Quon references fail to render the claimed invention obvious because these references fail to disclose or suggest several limitations as discussed above. Thus, Applicants submit that certain clear and important distinctions exist between the cited prior art and the claimed invention. Applicants

submit that these distinctions are more than sufficient to render the claims of the invention unanticipated by and unobvious in view of the prior art. It is therefore requested that claims 1-21 be found allowable, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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